

CLASSIFICATION ~~CONFIDENTIAL~~ **CONFIDENTIAL**  
 CENTRAL INTELLIGENCE AGENCY  
 INFORMATION FROM  
 FOREIGN DOCUMENTS OR RADIO BROADCASTS

REPORT

CD NO.

50X1-HUM

COUNTRY USSR  
 SUBJECT Medical - Immunology  
 HOW PUBLISHED Monthly periodical  
 WHERE PUBLISHED Moscow  
 DATE PUBLISHED 27 Jan 1949  
 LANGUAGE Russian

DATE OF INFORMATION 1949

DATE DIST. 14 Dec 1949

NO. OF PAGES 2

SUPPLEMENT TO REPORT NO.

THIS DOCUMENT CONTAINS INFORMATION AFFECTING THE NATIONAL DEFENSE OF THE UNITED STATES WITHIN THE MEANING OF ESPIONAGE ACT 50 U. S. C. 31 AND 32, AS AMENDED. ITS TRANSMISSION OR THE REVELATION OF ITS CONTENTS IN ANY MANNER TO AN UNAUTHORIZED PERSON IS PROHIBITED BY LAW. REPRODUCTION OF THIS FORM IS PROHIBITED.

THIS IS UNEVALUATED INFORMATION

SOURCE Meditsinskaya Sestra, No 2, 1949.ANATOXIN USED FOR ANTIDIPHTHERIA INOCULATION

M. L. Turich, Candidate of Med Sci

[ Digest ]

Anatoxin is substituted for toxin in the promotion of diphtherial immunity because it stimulates the production of antibodies in the blood and does not have the toxic qualities of the toxin itself. Anatoxin is prepared by growing the diphtheria bacillus in broth for 8 - 10 days and then inactivated (attenuation of the toxic properties) with a 0.4 percent solution of formalin at about 40 degrees centigrade for 3 - 4 weeks. It has a clear, yellowish color, like the broth. The strength must not be less than 20 AE (antigen units) per cubic centimeter.

Thirty to sixty AE are required for the immunization of one person. The initial dose of one cubic centimeter or 20 AE produces a reaction in 20 - 30 days, then the first revaccination in doubled quantity is administered. It is recommended that the interval between the initial inoculation and the first revaccination should not be prolonged except where necessary. In exceptional cases the interval may be prolonged up to 1½ months. When a second revaccination is required, 20 AE more are given after an interval of another 3 - 6 months. Immunity is assured for about 4 years, after which a booster of 20 AE is needed.

Dosages for immunizing children between the ages of 6 months and 8 years (in accordance with Order No 369 of the Ministry of Public Health USSR dated 1 October 1947) calls for 80 AE to be administered for those from 6 months to 1 - 2 years; 20 AE more at 4 - 5 years (second revaccination), and an additional 20 AE at 7 - 8 years (third revaccination).

**CONFIDENTIAL**

- 1 -

CLASSIFICATION		CONFIDENTIAL	
STATE	<input checked="" type="checkbox"/> NAVY	<input checked="" type="checkbox"/> NSRB	DISTRIBUTION
ARMY	<input checked="" type="checkbox"/> AIR	<input checked="" type="checkbox"/> FBI	

CONFIDENTIAL

50X1-HUM

In localities with epidemics, the second revaccination should be given earlier than the fourth year, but not earlier than one year after the first series of inoculations. When the AK power of one cubic centimeter is below the standard (that is, when there are less than 20 AE/1 cc) adjustments in dosage must be made in order to achieve the desired strength. Additional adjustments according to age must be made when inoculating children over 2 years for the first time.

During the outbreak of epidemics, children ranging from 6 months to one year and confined in infant homes, consultation rooms, and public nurseries must be inoculated. Children over 8 years (9 - 12 years) must also be immunized during epidemics.

When it is desired to obtain a less strong reaction, particularly with younger children, only 0.5 cubic centimeters is given in the first injection, then doubled after 20 days. Sometimes there is a swelling (10 x 10 centimeters or larger) at the injection site, and the temperature rises to 38 - 38.5 degrees centigrade or more. With sensitive children who suffer shock, 1:1,000 adrenaline in doses of 0.3 to one cubic centimeter can be given.

In the event that other conditions make it inadvisable to administer anatoxin injections, the individual should be marked for future examination. This does not exclude healthy children of infected families.

Records should be kept on all patients, including quarterly statistical data on the number of patients for the initial inoculation and for revaccination.

In order to carry out the inoculation program adequately, the medical unit should have on hand the following:

Diphtheria anatoxin for the initial inoculation -- 3.5 centimeters; diphtheria anatoxin for one revaccination -- 1.5 centimeters; 1 and 2 - cubic centimeters syringes -- 4 - 5; one needle per syringe for every 30 inoculations; cotton -- 0.5 gram per case; alcohol -- 0.5 grams per case; ether -- 0.25 grams per case; tincture of iodine -- 10 - 15 grams per 100 cases; mixture of alcohol with ether -- 150 grams (if necessary) per 100 - 120 persons.

There should also be a 1:1,000 solution of adrenalin (about 50 grams), aqua ammonia, valerian drops, etc.

The anatoxin should not be over 2 years old. Incidences of diphtheria in persons inoculated seven to nine times indicated a decrease over those who were not, and lessened the effect of the disease in others.

- E N D -

CONFIDENTIAL

- 2 -

CONFIDENTIAL